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EXAMINER

ENGLISH, PETER C

ART UNIT

PAPER NUMBER

3616

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,338

Applicant(s)

KESHAVARAJ, RAMESH

Examiner

Peter C. English

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Election/Restrictions

1. Upon further consideration, the election of species requirement is hereby withdrawn. All pending claims are treated on the merits in this Office action.

Drawings

2. The drawings should be corrected in the same manner as in parent Application No. 09/640,682. See the proposed drawing correction filed on 25 March 2002.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure that adapts the cushion to receive plastic rods or metal rings (claims 23, 30 and 37) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

4. The specification should be corrected in the same manner as in parent Application No. 09/640,682. See the amendment filed on 25 March 2002. Note that the page and line numbers of the instant specification are not the same as those in the parent application. Note also the examiner's comments in item 7 of the final Office action mailed on 02 May 2002.
5. Further, the specification is objected to because of the following informalities:
 - At page 34, line 7, "the top" should be "the center".
 - At page 35, line 2, "the top" should be "the center".
 - At page 36, line 6, "top, center," should be "center, body,".
 - At page 36, line 14, "top" should be "center".
 - At page 36, line 14, "center or" should be deleted.Appropriate correction is required.
6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The specification fails

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to describe an air bag with a face member and first and second body segments, wherein the air bag has a "conical", "pyramidal" or "prismatic" body (claims 44-46 and 48-50). Further, the specification fails to describe an air bag with a face panel and at least one body panel, wherein the air bag has one of a "conical, pyramidal, and prismatic" body (claim 51). Correction is required.

Claim Objections

7. Claim 9 is objected to because the limitation "...coated with a disperse polymer, such as polyamide or urethane" (lines 1-2) is inconsistent with page 27, lines 21-22 of the specification. The description found in the specification should correspond to the subject matter of the claims and vice-versa. Appropriate correction is required.

8. Claims 12, 15, 25-27 and 29-34 are objected to because of the following informalities:

In claim 12, at line 3, "which" should be inserted before "comprises".

In claim 15, at line 2, "angel" should be "angle".

In claims 25-27, at line 2, "in" should be "is".

In claims 32-34, at line 1, "perimeter" should be "perimeters".

Appropriate correction is required.

9. Claim 19 is objected to as being an improper claim because it attempts to incorporate limitations by reference to drawing figures. Except in exceptional circumstances, a claim must be complete in and of itself. See MPEP 2173.05(s). Appropriate correction is required.

10. It is noted that while claims 29-34 currently depend from dependent claim 25, applicant may have intended for these claims to depend from independent claim 28.

Claim Rejections - 35 USC § 112

11. Claims 23, 30 and 37 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to describe and the

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drawings fail to show the structure that adapts the cushion to receive plastic rods or metal rings.

12. Claims 1-41 and 51-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 21, 28 and 35, at line 1, the phrase "simplified airbag cushion" renders the claim indefinite because it is unclear what is added to the claim by the adjective "simplified". Determining whether something is simplified requires a comparison with something else. Since a claim must stand alone, it is improper for a claim to compare the invention with something else. Further, the degree to which the invention is simplified is unclear.

Claim 1 is rendered indefinite by the arrangement of the paragraphs and because of the failure to relate the elements recited at lines 7-17 to any other elements of the invention. It is unclear from the claim language what element of the invention includes the limitations recited in lines 7-17. Further, the indentation of lines 18-21 inaccurately suggests that the third panel section is part of the element defined by the limitations in lines 7-17. The examiner suggests: add the statement "and wherein each of said first and second body panel sections comprises:" to the end of the paragraph spanning lines 3-6; and decrease the indentation of lines 18-21 so that it is clear that the third panel section is a distinct element from the first and second panel sections.

In claim 1, at line 30, the term "said center panel" lacks proper antecedent basis. The examiner suggests: at line 30, change "center panel" to "third panel section".

In claim 9, at line 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP 2173.05(d).

Claim 17 is indefinite because the preamble states that it is drawn to a "vehicle restraint system" but the claim fails to define what elements make up such a system. Instead, the claim only recites a cushion, which in and of itself does not constitute a system. For this reason, it is unclear what is encompassed by the claim's reference to a "system".

Claim 18 is indefinite because the preamble states that it is drawn to an "airbag module" but the claim fails to define what elements make up such a module. Instead, the claim only

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recites a cushion, which in and of itself does not constitute a module. For this reason, it is unclear what is encompassed by the claim's reference to a "module".

Claim 19 fails to particularly point out and distinctly claim the invention because it attempts to incorporate limitations by reference to drawing figures. Except in exceptional circumstances, a claim must be complete in and of itself. See MPEP 2173.05(s). Further, since the figures referred to in claim 19 contain multiple embodiments, it is unclear which embodiment(s) is covered by the claim.

In claims 23 and 24, at line 1, the term "said structure" is indefinite because claim 21 recites both a "body structure" and a "three dimensional structure". It is unclear which of these structures the term "said structure" refers to.

Claims 25-27 are indefinite because they state that the panel sections are joined by a single joining seam, with a substantial portion of this single seam being straight. This is inaccurate since the panel sections are joined by a plurality of seams. The examiner suggests that applicant adopt the same language as that found in claims 32-34.

In claims 29-31, at line 1, the term "said structure" is indefinite because claim 28 recites both a "body structure" and a "three dimensional structure". It is unclear which of these structures the term "said structure" refers to.

Claim 32 is indefinite because it is unclear how the limitation found in this claim further limits the scope of claim 25, from which it depends. Though the wording is different, it appears that claim 32 recites essentially the same limitation as that recited in claim 25.

Claims 33 and 34 are indefinite because they recite broader limitations than that recited in claim 25, from which they depend. Note that claim 25 is limited to 70% straight seams, while claims 33 and 34 recite 60% and 50%, respectively.

In claim 35, at line 4, the term "the top or bottom portions" lacks proper antecedent basis. Further, the use of the plural "portions" is inconsistent with the alternative "or". The term "the top or the bottom portions" (line 5) is indefinite for the same reason.

Claim 35 is indefinite because it states that a top or bottom portion of the air bag includes a side portion of the air bag (see lines 5-6). By definition, the top or bottom of an element, does not include the side of the element.

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In claims 36-38, at line 1, the term "said structure" is indefinite because claim 35 recites both a "body structure" and a "three dimensional structure". It is unclear which of these structures the term "said structure" refers to.

In claims 39-41, at line 1, the term "the seams" lacks proper antecedent basis.

Claim 51 is indefinite because it states that the air bag has "at least one of a conical, pyramidal and prismatic body". The phrase "at least one of" allows for an air bag having more than one of the shapes listed in the claim. This is not possible.

Claim 61 is indefinite because it states that both the face member and the body member include first and second "body segments". The examiner suggests: at line 1, change "body" to "face".

In claims 62-67, at line 1, the term "said body panels" lacks proper antecedent basis.

In claims 62-67, at line 2, the term "the body" lacks proper antecedent basis.

Double Patenting

13. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

14. Claims 1-18 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-18 of copending Application No. 09/640,682. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,019,390 in view of Nishimura et al. (JP 8-230592). Claims 1-20 of the instant application differ from claims 1-15 of Patent No. 6,019,390 in that the instant claims recite first and second panel sections made up of a plurality of panels. As shown in Fig. 2, Nishimura et al. discloses an air bag cushion comprising three panel sections 1-3, with the first and second panel sections 1 and 2 having reinforcement panels 1R, 2R attached to a main panel (see Figs. 1F and 2A). From this teaching of Nishimura et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify claims 1-15 of Patent No. 6,019,390 by adding reinforcement panels to the first and second panel sections so that an air bag housing and/or inflator can be securely attached to the air bag cushion.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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18. Claims 1, 6, 15-42, 45 and 51-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura et al. (JP 8-230592). As shown in Fig. 2, Nishimura et al. discloses an air bag cushion comprising three panel sections 1-3, with the first and second panel sections 1 and 2 having reinforcement panels 1R, 2R attached to a main panel (see Figs. 1F and 2A). The first panel section 1 has substantially straight lateral edges that are sewn to corresponding lateral edges of the second panel section 2 (see Figs. 2C and 2D). The third panel section 3 has boundary edges that are sewn to substantially straight upper edges 1S, 2S and substantially straight intermediate edges 1L, 2L of the first and second panel sections 1, 2. As shown in Fig. 2A, the intermediate edges 1L, 2L intersect the upper edges 1S, 2S at an angle greater than 90 degrees. With respect to claim 61, the upper and lower halves of the third panel section 3 are considered to be "segments" as is broadly claimed.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 43, 44 and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al. (JP 8-230592). With respect to claims 43 and 47, it would have been obvious to one of ordinary skill in the art to change the sizes of the first and second panel sections 1 and 2 of Nishimura et al. such that one panel section mates with more than 50% of the third panel section 3 and the other panel section mates with less than 50% of the third panel section in order to provide the air bag cushion with a desired shape. For example, it would be desirable for the lower panel section 2 to be larger than the upper panel section 1 in the case of a passenger side air bag cushion so that the lower portion of the cushion deploys downward and engages an occupant's lap/hips. Further, such a modification involving a mere change in size is generally considered to be within the level of ordinary skill in the art.

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With respect to claims 44, 46, 48 and 50, the shape of the air bag cushion is considered to be an obvious matter of design choice, especially in light of the fact that applicant has failed to establish the criticality of one specific shape. Further, a modification involving a mere change in shape is generally considered to be within the level of ordinary skill in the art.

21. Claims 1-6, 14-27 and 29-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaji et al. (US 5,316,337) in view of Nishimura et al. (JP 8-230592) and Bishop (US 5,520,414). Yamaji et al. discloses an air bag cushion comprising three panel sections 1, 3, 4. The first panel section 3 has substantially straight lateral edges 5a, 5'a that are sewn to corresponding lateral edges 6a, 6'a of the second panel section 4. The third panel section 1 is rectangular (and "substantially square") and has boundary edges 1bc that are continuous with substantially straight upper edges of the first and second panel sections 3, 4. The third panel section also has boundary edges that are sewn to substantially straight intermediate edges 5b, 5'b, 6c, 6'c of the first and second panel sections 3, 4. As shown in Fig. 1, the intermediate edges 5b, 5'b, 6c, 6'c intersect the upper edges of the first and second panels sections 3, 4 at an angle greater than 90 degrees.

Yamaji et al. lacks panel sections which are separately formed and sewn together. Nishimura et al. teaches an air bag cushion comprising three panel sections 1-3 which are separately formed and sewn together (see Fig. 2). Bishop teaches that an air bag cushion formed from one piece of fabric can alternatively be formed of separate sections that are sewn together (see column 4, lines 34-40). From these teachings of Nishimura et al. and Bishop, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamaji et al. by forming the panel sections separately and sewing them together because this simplifies the shapes which must be cut from a sheet of fabric and allows the shapes to be cut from locations that minimize the amount of fabric that is wasted.

Yamaji et al. also lacks first and second panel sections made up of a plurality of panels. As shown in Fig. 2, Nishimura et al. discloses an air bag cushion comprising three panel sections 1-3, with the first and second panel sections 1 and 2 having reinforcement panels 1R, 2R attached to a main panel (see Figs. 1F and 2A). From this teaching of Nishimura et al., it would have been obvious to further modify Yamaji et al. by adding reinforcement panels to the

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first and second panel sections so that an air bag housing and/or inflator can be securely attached to the air bag cushion.

With respect to claims 4, 5 and 14, the selection of specific dimensions and/or shapes is considered to be a matter of obvious design choice. Further, such a modification is generally recognized as being within the level of ordinary skill in the art.

With respect to claims 43, 44, 46-48 and 50, see the explanation in item 20 above.

22. Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al. in view of Keshavaraj '393 (US 5,855,393). Nishimura et al. meets all of the limitations of claim 6 as set forth above but fails to teach the fabric properties recited in claims 7-13.

Keshavaraj '393 teaches an airbag cushion having these fabric properties (see column 4, lines 27-65). Therefore, it would have been obvious to modify Nishimura et al. by providing the cushion with the fabric properties taught by Keshavaraj '393 because this provides the cushion with the desired properties (i.e., flexibility, porosity, strength, etc.).

23. Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaji et al. in view of Nishimura et al. and Bishop as applied to claim 6 above, and further in view of Keshavaraj '393 (US 5,855,393). The Yamaji et al., Nishimura et al. and Bishop combination fails to teach the fabric properties recited in claims 7-13. Keshavaraj '393 teaches an airbag cushion having these fabric properties (see column 4, lines 27-65). Therefore, it would have been obvious to further modify Yamaji et al. by providing the cushion with the fabric properties taught by Keshavaraj '393 because this provides the cushion with the desired properties (i.e., flexibility, porosity, strength, etc.).

Conclusion


24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. English whose telephone number is 703-308-1377. The examiner can normally be reached on Monday through Thursday (7:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 703-308-2089. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


Peter C. English
Primary Examiner
Art Unit 3616

pe
January 7, 2003